Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-CON)	In re Application No. ~~Not yet assigned~~ 10/600,012
INFORMATION DISCLOSURE STATEMENT *(Use several sheets if necessary)*		Applicant: Danishefsky *et al.*	
		Filing Date: June 19, 2003	Group: Not yet assigned

U. S. PATENT DOCUMENTS

Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Subclass
	5,053,489	Kufe ~~et al.~~	10/1/91	530	350
	* 5,212,298	Rademacher *et al.*	5/18/93	536	55.2
	* 5,229,289	Kjeldsen *et al.*	7/20/93	435	240.27
	* 5,280,113	Rademacher *et al.*	1/18/94	536	55.2
	5,376,531	Anderson *et al.*	12/27/94	435	240.24
	* 5,421,733	Nudelman *et al.*	6/6/95	435	105
	5,491,088	Hellstrom *et al.*	2/13/96	435	240.24
	5,625,030	Williams *et al.*	4/29/97	528	361
	* 5,660,834	Kjeldsen *et al.*	8/26/97	424	277.1
	5,679,769	Danishefsky	10/21/97	530	322
	* 5,683,674	Taylor-Papadimitriou *et al.*	11/4/97	424	1.49
	* 5,747,048	Kjeldsen *et al.*	5/5/98	424	277.1
	5,798,090	Longnecker *et al.*	8/25/98	424	279.1
	5,807,559	Jondal *et al.*	9/15/98	424	278.1
	* 5,858,994	Kretzschmar *et al.*	01/12/99	514	62
	5,871,990	Clausen *et al.*	2/16/99	435	193

Jeffrey B. Russel March 1, 2004

Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-CON)	In re Application No. ~~Not yet assigned~~ 10/600,012
INFORMATION DISCLOSURE STATEMENT *(Use several sheets if necessary)*		Applicant: Danishefsky *et al.*	
		Filing Date: June 19, 2003	Group: Not yet assigned

	6,013,779	Wong *et al.*	1/11/00	536	18.6
	* 6,222,020	Taylor-Papadimitriou *et al.*	4/24/01	530	395
	6,238,668	Danishefsky *et al.*	5/29/01	424	184.1

U. S. PATENT APPLICATIONS Class/Subclass

	Document No.	Applicant	Filing Date		
	†† USSN 08/457,485	Taylor-Papadimitriou *et al.*	6/1/95	—	—
	† USSN 09/083,776	Danishefsky *et al.*	3/25/98	—	—
	† USSN 10/205,021	Danishefsky *et al.*	7/25/02	—	—

FOREIGN PATENT DOCUMENTS

Examiner's Initials	Document No.	Country	Publication Date	Translation		Class/Subcl.
				Yes	No	
	EP 341252	EP	11/19/97			—
	JP 8-319300	JP	12/3/96		X	—
	WO 96/34005	PCT	10/31/96			—
	WO 96/40198	PCT	12/19/96			—
	WO 98/30190	PCT	7/16/98			—
	* WO 98/46246	PCT	10/22/98			—
	WO 99/48515	PCT	9/30/99			—
	WO 01/14395	PCT	03/01/01			—

Jeffrey E. Russel

March 1, 2004

Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-CON)	In re Application No. ~~Not yet assigned~~ 10/600,012
INFORMATION DISCLOSURE STATEMENT *(Use several sheets if necessary)*		Applicant: Danishefsky *et al.*	
		Filing Date: June 19, 2003	Group: Not yet assigned

Examiner's Initials	**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, *Etc.*)**
	Allen, *et al.*, "A Second Generation Synthesis of the MBrl (Globo-H) Breast Tumor Antigen: New Application of the N-Pentenyl Glycoside Method for Achieving Complex Carbohydrate Protein Linkages", Chem. Eur. J., **6**(8): 1366-1375, 2000.
	Balcom, B.J. and Petersen, N.O., "Synthesis and Surfactant Behavior of an Unusual Cyclic Triester Based on a *cis*, *cis*-1, 3, 5-Cyclohexanetriol Headgroup," *Langmuir*, 7:2425-2427, 1991.
	Bayle, *et al.*, "O-(3-Butenyl) A Stable Blocking Group Removable by Ozonolysis", *Carbohydrate Research*, **232**: 375-380, 1992.
	* Bencomo *et al.*, "Synthesis of glycopeptides having clusters of *O*-glycosylic disaccharide chains. . .," *Carbohydrate Research*, **116**, C9-C12, 1983.
	Bilodeau M.T., "Total Synthesis of a Human Breast Tumro Associated Antigen", *J. Am. Chem. Soc.*, **117**:7840-7841, 1995.
	Boehm T. *et al.*, "Development of a Novel Silyl Ether Linker for Solid-Phase Organic Synthesis" *J. Org. Chem.*, **61**:6498-6499, 1996.
	Boon, T., "Toward a Genetic Analysis of Tumor Rejection Antigens," *Adv. Can. Res.*, **58**:177-211, 1992.
	Broddefalk, *et al.*, "Preparation of a Glycopeptide Analogue of Type II Collagen - Use of Acid Labile Protective Groups for Carbohydrate Moieties in Solid Phase Synthesis of O-Linked Glycopeptides", *Tetrahedron Letters, NL, Elsevier Science*, **37**(17): 3011-3014, 1996.
	Cabaret, *et al.*, "Amphiphilic Liposaccharides. Synthesis and Reductive Cleavage of C-Allyl, O-Allyl, and O-Butenyl Glycosyl Derivatives", *Carbohydrate Research*, **189**: 341-348, 1989.
	Chan *et al.*, "Polymer-anchored Organosilyl Protecting Group in Organic Synthesis," *J. Chem. Soc., Chem. Commun.*, 909-911, 1985.
	Collins and Ferrier "Monosaccharides: Their Chemistry and Their Roles in Natural Products, Publ. by John Wiley & Sons, Ltd., page 4, 1995.
	Commissions on Nomenclature of Organic Chemistry and Physical Organic Chemistry, IUPAC, *Pure and Applied Chemistry*, **67**, 1325 and 1334, 1995.
	Danishefsky *et al.* "Glycals in Organic Synthesis: The Evolution of Comprehensive Strategies for the Assembly of Oligosaccharides and Glycoconjugates of Biological Consequence" *Angew. Chem. Int. Ed. Engl.*, **35**:1380-1419, 1996.
	Danishefsky *et al.* "From the Laboratory to the Clinic: A Retrospective on Fully Synthetic Carbohydrate-Based Anticancer Vaccines" *Angew. Chem. Int. Ed. Engl.*, **39**:836-863, 2000.
	Dermer, G.B., "Another Anniversary for the War on Cancer," *Bio/Technology*, **12**, 320, 1994.
	Deshpande *et al.*, "Strategy in Oligosaccharide Synthesis: An Application to a Concise Total Synthesis of the KH-1 (Adenocarcinoma) Antigen," *J. Am. Chem. Soc.*, **120**, 1600-1614, 1998.

Jeffrey E. Russel

March 1, 2004

Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-CON)	In re Application No. ~~Not yet assigned~~ 10/600,012
INFORMATION DISCLOSURE STATEMENT *(Use several sheets if necessary)*		Applicant: Danishefsky *et al.*	
		Filing Date: June 19, 2003	Group: Not yet assigned

	* Elofsson and Kihlberg, "Synthesis of Tn and Sialyl Tn Building Blocks for Solid Phase Glycopeptide Synthesis," *Tetrahedron Letters*, 36, 7499-7502, 1995
	* Elofsson *et al.*, "Preparation of Tn and Sialyl Tn Building Blocks. . . .," *Tetrahedron*, **53**, 369-390, 1997.
	Ezzell, "Cancer "Vaccines": An Idea Whose Time Has Come?" J. NIH Res, **7**, 46-49, 1995.
	Finn *et al.*, "MUC-1 Epithelial Tumor Mucin-based Immunity and Cancer Vaccines" *Immunol. Rev.*, **145**, 61-89, 1995.
	Fraser-Reid, *et al.*, "N-Pentenyl Glycosides in Organic Chemistry: A Contemporary Example of Serendipity", *Synlett*, 927-942, 1992.
	Freshney, R.I., "Culture of Animal Cells, A Manual of Basic Techniques, Alan R. Liss, Inc., New York, p. 3-4, 1983.
	* Fung *et al.*, "Active Specific Immunotherapy of Murine Mammary. . .," *Cancer Research*, **50**, 4308-4314, 1990.
	Garg *et al.*, "Developments in the Synthesis of Glycopeptides Containing Glycosyl L-Asparagine, L-Serine, and L-Threonine" *Adv. Carb. Chem. Biochem.*, **50**, 277-310, 1994.
	* Gleiter *et al.*, "Synthesis and Properties of Eight-and Ten-Membered Selenaradialenes," *Tetrahedron Letters*, **35**, 8779-8782, 1994.
	* Grice *et al.*, "Tuning and Reactivity of Glycosides: Efficient One-pot Oligosaccharide Synthesis," *Synlett*, 781-784, 1995.
	Iijima, H. and Ogawa, T. "Synthesis of Mucin-type O-Glycosylated Amino Acid β-Gal-(1-3)-[α-Neu5Ac-2 6)]-GalNAc-(1 3)-Ser" *Carbohydr. Res.*, **186**, 95-106, 1989.
	Kaizu *et al.*, "Novel Fucolipids of Human Adenocarcinoma: Monoclonal Antibody Specific for Trifucosyl Le^y ($III^3FucV^3FucVI^2FucnLc_6$) and a Possible Three-dimensional Epitope Structure," *J. Biol. Chem.* **261**, 11254-11258, 1986.
	* Kameyama *et al.*, "Total Synthesis of Sialyl Lewis X*," *Carbohydrate Research*, **209**, c1-c4, 1991.
	Kim *et al.*, "Expression of Le^Y and Extended Le^Y Blood Group-related Antigens in Human Malignant, Premalignant, and Nonmaligmant Colonic Tissues," *Cancer Res.*, 46, 5985-5992, 1986.
	Koganty *et al.*, "Glycopeptide- and Carbohydrate-based Synthetic Vaccines for the Immunotherapy of Cancer," *Drug Discovery Today*, **5**, 190-198, 1996.
	* Kondo *et al.*, "*In vitro* Action of Human and Porcine *α-amylases*. . .," *Carbohydrate Research*, **204**, 207-213, 1990.
	* Kunz, H. and Birnbach, S., "Synthesis of *O*-Glycopeptides of the Tumor-Associated T_N and T-Antigen Tyoe and their Binding to Bovine Serum Albumin" *Angew. Chem. Int. Ed. Engl.*, **25**, 360-362, 1986.
	* Kunz et al., "Construction of Disaccharide *N*-Glycopeptides – Synthesis of the Linkage Region of the Transmembrane-Neuraminidase of an Influenza Virus," *Angew. Chem. Int. Ed.*

Jeffrey B. Russel March 1, 2004

Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-CON)	In re Application No. ~~Not yet assigned~~ 10/600,012
INFORMATION DISCLOSURE STATEMENT *(Use several sheets if necessary)*		Applicant: Danishefsky *et al.*	
		Filing Date: June 19, 2003	Group: Not yet assigned

	Engl., **24**(10):883-885, 1985.
	Lassaletta, *et al.*, "Glycosyl Imidates. Synthesis of the Hexasaccharide Moiety of Globo H (Human Breast Cancer) Antigen", Liebigs Ann. **9**: 1417-1423, 1996.
	Lay L. *et al.*, "Oligosaccharides Related to Tumor-Associated Antigens", *Helv. Chim. Acta*, **77**:509-514, 1994.
	* Liebe, B. and Kunz, H., "Solid Phase Synthesis of a Tumor-Associated Sialyl-T_N Antigen Glycopeitde-. . .," *Angew. Chem. Int. Ed. Engl.* **33**, 618-621, 1997.
	* Lönn, H. "Synthesis of a Tri- and a Hepta-saccharide. . .," *Carbohydrate Research*, 139, 105-113, 1985
	* Nicolaou *et al.*, "Stereocontrolled Synthesis of Sialyl Le^x. . .," *J. Chem. Soc., Chem. Commun.*, 870-872, 1991.
	Nudelman *et al.*, "Novel Fucolipids of Human Adenocarcinoma: Characterization of the Major Le^y Antigen of Human Adenocarcinoma as Trifucosylnonaosyl Le^y Lycolipid ($III^3FucV^3FucVI^2FucnLc_6$), *J. Biol. Chem.*, **261**, 11247-11253, 1986.
	Park, *et al.*, "Total Synthesis and Proof of Structure of a Human Breast Tumor (Globo-H) Antigen", *J. Am. Chem. Soc.*, **118**(46): 11488-11500, 1996.
	Paulsen *et al.*, "Glycosidierung mit Thioglycosiden von Oligosacchariden zu Segmenten von O-Glycoproteinen" *Liebigs Ann. Chem.*, 75-86, 1988.
	Ragupathi *et al.*, "Immunization of Mice with a Fully Synthetic Globo H Antigen Results in Antibodies Against Human Cancer Cells: A Combined Chemical Immunological Approach to the Fashioning of an Anticancer Vaccine" *Angew. Chem. Int. Ed. Engl.* **36**, 125-128, 1997.
	Ragupathi, *et al.*, "A Fully Synthetic Globo H Carbohydrate Vaccine Induces a Focused Humoral Response in Prostate Cancer Patients: A Proof of Principle", *Angew. Chem., Int. Ed.*, 38(4): 563-566, 1999.
	Ragupathi, G. "Carbohydrate Antigens as Targets for Active Specific Immunotherapy" *Cancer Immunol. Immunther.*, **43**, 152-157, 1996.
	Randolph J.T. *et al.*, "An Interactive Strategy for the Assembly of Complex, Branched Oligosaccharide Domains on a Solid Support: A Concise Synthesis of the $Lewis^b$ Domain in Bioconjugatable Form", *Angew. Chem. Int. Ed/ Engl.*, 33(14):1470-1473, 1994.
	Randolph *et al.*, "Major Simplifications in Oligosaccharide Syntheses Arising from a Solid-Phase Based Method: An Application to the Synthesis of the Lewis b Antigen," *J. Amer. Chem. Soc.*, **117**, 5712-5719, 1995.
	Roberge *et al.*, "A Strategy for a Convergent Synthesis of N-Linked Glycopeptides on a Solid Support," *Science* (Washington, D.C.), **269**, 202-204, 1995.
	* Schultheiss-Riemann, P. and Kunz, H., "*O*-Glycopeptide Synthesis. . .," *Angew. Chem. Int. Ed. Engl.*, **22**, 62-63, 1983.
	Seeberger *et al.*, "Synthesis of Biologically Important Oligosaccharides and Other Glycoconjugates by the Glycal Assembly Method," *Aldrichimica Acta*, 30(3), 75-92, 1997.

Jeffrey E. Russel March 1, 2004

Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-CON)	In re Application No. ~~Not yet assigned~~ 10/600,012
INFORMATION DISCLOSURE STATEMENT *(Use several sheets if necessary)*		Applicant: Danishefsky *et al.*	
		Filing Date: June 19, 2003	Group: Not yet assigned

	Slovin *et al.*, "Carbohydrate Vaccines in Cancer: Immunogenicity of Fully Synthetic Globo H Hexasaccharide Conjugate in Man" *Proc. Natl. Acad. Sci. USA*, **96**, 5710-5715, 1999.
	Spitler, "Cancer Vaccines: The Interferon Analogy," *Cancer Biotherapy*, **10**, 1-3, 1995.
	Tao, M. and Levy, R. "Idiotype/Granulocyte-macrophage Colony-simulating Factor Fusion Protein as a Vaccine for B-cell Lymphoma," *Nature*, **362**, 755-758, 1993.
	Tokoyuni *et al.*, "Synthetic Vaccines: I. Synthesis of Multivalent Tn Antigen Cluster-Lysyllysine Conjugates," *Tetrahedron Lett.*, **31**, 2673-2676, 1990.
	Tokoyuni, T. and Singhal, A.K., "Synthetic Carbohydrate. . .," *Chem. Soc. Rev.*, **24**, 231-242, 1995.
	* Toyokuni *et al.*, "Synthetic Carbohydrate Vaccines: Synthesis and Immunogenicity of Tn Antigen Conjugates", *Bioorg. Med. Chem.*, **2**, 1119-1132, 1994.
	Udodong, *et al.*, "A Ready, Convergent Synthesis of the Heptasaccharide GPI Membrane Anchor of Rat Brain Thy-1 Glycoprotein" *J. Am. Chem. Soc.*, **115**: 7886-7887, 1993.
	Waldmann *et al.* "New Enzymatic Protecting Group Techniques for the Construction of Peptides and Glycopeptides" *Biomed. Biochim. Acta.* **50** (10/11) S243-S248, 1991.
	†† Yura *et al.*, "Preparation of oligosaccharide-linked polystyrene and method for immobilization of lectin and base materials for cells", abstract, Jpn. Kokai Tokkyo Koho (Japan), 03 December 1996.
	* Zhang *et al.*, "Immune Sera and Monoclonal Antibodies Define Two Configurations for the Sialyl Tn Tumor Antigen", *Cancer Res.*, **55**, 3364-3368, 1995.
	International Search Report issued for PCT application PCT/US99/06976 corresponding to 09/276,595.

EXAMINER Jeffrey E. Russel	**DATE CONSIDERED** March 1, 2004

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

* denotes references cited in IDS and supplemental IDS submitted for parent application USSN 09/276,595, filed March 25, 1999.

† denotes references cumulative with WO 98/46246; copies of references are not included.

†† Cited document is not at present available to the undersigned, or is available in the file of a prior related application relied upon for an earlier filing date under 35 U.S.C. § 120.

Form PTO-1449 (REV. 8-83)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-A)	In re Application No. 10/600,012
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (*Use several sheets if necessary*)		Applicant: Danishefsky, *et al.*	
		Filing Date: June 19, 2003	Group: 1645

U.S. PATENT DOCUMENTS

Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Subclass
	6,090,789	Danishefsky *et al.*	July 18, 2000	514	25
	US RE38,046 E	Longenecker *et al.*	March 25, 2003	424	279.1

U.S. PATENT PUBLICATIONS

Examiner's Initials:	Publication Number:	Applicant:	Publication Date:	Class	Subclass
	US 2002/0006900	Danishefsky *et al.*	January 17, 2002	514	8
	US 2002/0038017	Danishefsky *et al.*	March 28, 2002	536	53

FOREIGN PATENT DOCUMENTS

Examiner's Initials	Document No.	Country	International Publication Date	~~Translation~~ Class/Subclass ~~Yes~~	~~No~~
	WO 99/15201	PCT	April 1, 1999		
	WO 01/14395 A2	PCT	March 1, 2001		
	WO 01/14395 A3	PCT	March 1, 2001		

OTHER DOCUMENTS

Examiner's Initials	Citation (Including Author, Title, Date, Pertinent Pages, Etc.)
	Allen *et al.*, "Pursuit of optimal carbohydrate-based anticancer vaccines: preparation of a multiantigenic unimolecular glycopeptide containing the Tn, MBr1, and Lewis^y antigens", *J. Am. Chem. Soc.*, **123**:1890-1897, 2001.
	Allen *et al.*, "A second generation synthesis of the MBr1 (Globo-H) breast tumor antigen: new application of the n-pentenyl glycoside method for achieving complex carbohydrate protein linkages", *Chem. Eur. J.*, 6(8):1366-1375, 2000.
	Biswas *et al.*, "Construction of carbohydrate-based antitumor vaccines: synthesis of glycosyl amino acids by olefin cross-metathesis", *Tetrahedron Letters*, **43**:6107-6110, 2002.
	Blackwell *et al.*, "New approaches to olefin cross-metathesis", *J. Am. Chem. Soc.*, **122**:58-71, 2000.
	Bosse *et al.*, "Linear synthesis of the tumor-associated carbohydrate antigens Globo-H, SSEA-3, and Gb3", *J. Org. Chem.*, **67**:6659-6670, 2002.

Form PTO-1449 (REV. 8-83) U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 2003080-0127 (SK-816-A)	In re Application No. 10/600,012
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT *(Use several sheets if necessary)*	Applicant: Danishefsky, *et al.*	
	Filing Date: June 19, 2003	Group: 1645

JR	Keding *et al.*, "Hydroxynorleucine as a glycosyl acceptor is an efficient means for introducing amino acid functionality into complex carbohydrates", *Tetrahedron Letters*, **44**:3413-3416, 2003.
JR	Kim *et al.*, "Effect of immunological adjuvant combinations on the antibody and T-cell response to vaccination with MUC1-KLH and GD3-KLH conjugates", *Vaccine*, **19**:530-537, 2001.
JR	Kudryashov *et al.*, "Toward optimized carbohydrate-based anticancer vaccines: Epitope clustering, carrier structure, and adjuvant all influence antibody responses to lewis^y conjugates in mice", *Proc. Natl. Acad. Sci. USA*, **98**:3264-3269, 2001.
JR	Nicolaou *et al.*, "A practical and enantioselective synthesis of glycosphingolipids and related compounds. Total synthesis of Globotriasosylceramide (Gb_3)", *J. Am. Chem. Soc.*, **110**:7910-7912, 1988.
JR	Ragupathi *et al.*, "A Fully synthetic Globo H carbohydrate vaccine induces a focused humoral response in prostate cancer patients: a proof of principle", *Angew. Chem. Int. Ed.*, **38**(4):563-566, 1999.
JR	Ragupathi *et al.*, "On the power of chemical synthesis: Immunological evaluation of models for multiantigenic carbohydrate-based cancer vaccines", *Proc. Natl. Acad. Sci. USA*, **99**(21):13699-13704, 2002.
JR	Slovin *et al.*, "Carbohydrate vaccines in cancer: Immunogenicity of a fully Globo H hexasaccharide conjugate in man", *Proc. Natl. Acad. Sci. USA*, **96**:5710-5715, 1999.
JR	Williams *et al.*, "In pursuit of an anticancer vaccine: a monomolecular construct containing multiple carbohydrate antigens", *Tetrahedron Letters*, **41**:9505-9508, 2000.
JR	Database BIOSIS'Online! Biosciences Information Service, Philadelphia, PA, US; 22 March 2002, Kovbasnjuk Olga *et al.*, "Glycosphingolipid Gb3 as biomarker for invasive colon carcinoma cells", FASEB Journal, 16(5):A1200, 2002, Annual Meeting of Professional Research Scientists on Experimental Biology; New Orleans, LA, USA, April 20-24, 2002.
JR	International Search Report issued for PCT application PCT/US03/22657

EXAMINER Jeffrey Russel	**DATE CONSIDERED** March 1, 2004

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.